

## HYPERBARIC OXYGEN ORGAN PRESERVATION SYSTEM (HOOPS)

**Abstract:** A method of delivering oxygen to a biological entity comprising of dissolving oxygen into a perfusate and forcing the perfusate through the biological entity whereby substantially high levels of oxygen are available to satisfy the biological demand of the biological entity. An apparatus for supplying oxygen to a biological entity whereby substantially high levels of oxygen are available to satisfy the metabolic demand of said biological entity. An apparatus for supplying metabolic supplements to a biological entity whereby the effect of said metabolic supplement on said biological entity can be monitored. The method and apparatus keeps a biological entity such as an organ viable at a range of temperatures while in an aerobic state. This allows the study of said organ from a physiological or experimental standpoint. It allows said organ to be transplanted with little or no reperfusion injury, thus increased survivability over the prior art.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100